

WHAT IS CLAIMED IS:

1. A disk control system that receives a process command for writing or reading of data from an information processing device, and performs a write or read process of data with respect to a logical device corresponding to a logical unit specified by that process command, comprising:

means for managing, as units, logical devices, which are logical storage regions that have been set in a storage region provided by a disk drive;

means for storing a correspondence between said logical devices and logical units, which are storage regions that have been set logically; and

means for assigning, when a process command has been received for a logical unit to which no logical device has been assigned, a logical device to that logical unit and performing processing with regard to that logical device.

2. A disk control system according to claim 1, further comprising:

means for responding to said information processing device, when a process command that does not cause a process with regard to said logical device has been received from said information processing device, by performing a process corresponding to that process command without performing said assignment.

3. A disk control system according to claim 1, further comprising:

means for assigning a plurality of said logical devices

to one of said logical units; and

means for assigning to that logical unit only a number of said logical devices that is necessary in order to perform the processing corresponding to said process command.

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4. A disk control system according to claim 1, further comprising:

means for sending to said information processing device a message indicating that said process command cannot be
10 processed, if there is no logical device that can be assigned to said logical unit.

5. A disk control system according to claim 1, further comprising:

15 means for sending to said information processing device a message indicating that reading is impossible, if a process command requesting the reading of data from a logical unit to which no logical device has been assigned has been received from said information processing device.

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6. A disk control system according to claim 1, wherein said information processing device is an ope system computer.

7. A disk control system according to claim 1, wherein said
25 process command of the disk control system is a SCSI command.

8. A control method for a disk control system that manages, as units, logical devices, which are logical storage regions that have been set in a storage region provided by a disk drive,
30 that stores a correspondence between said logical devices and

logical units, which are storage regions that have been set logically, that receives a process command that has been sent from an information processing device, and that performs processing with respect to a logical device corresponding to the logical unit specified by that process command, the control method comprising:

a first step of receiving a process command for a logical unit to which no logical device has been assigned;

a second step of assigning to that logical unit a logical device, when in said first step a process command has been received for a logical unit to which no logical device has been assigned; and

a third step of performing said process command with regard to the logical device that has been assigned in said second step.

9. A control method for a disk control system according to claim 8, further comprising:

a determination step of determining whether the process command received from said information processing device is a command that does not cause a process with regard to said logical device; and

if it has been determined in said determination step that said process command does not cause a process with regard to said logical device, a step of performing a process corresponding to that process command without assigning said logical device.

10. A control method for a disk control system that manages, as units, logical devices, which are logical storage regions

that have been set in a storage region provided by a disk drive,
that stores a correspondence between said logical devices and
logical units, which are storage regions that have been set
logically, that receives a process command that has been sent
5 from an information processing device, and that performs
processing with regard to a logical device corresponding to
the logical unit specified by that process command, the control
method comprising:

10 a first step of receiving a process command for a logical
unit;

a second step of determining whether a logical device has
been assigned to that logical unit; and

15 if in said second step a logical device is assigned to
said logical unit, a third step of performing with regard to
that logical device a process corresponding to said process
command, and, if in said second step no logical device is
assigned to said logical unit, assigning a logical device to
said logical unit and performing with regard that logical device
a process corresponding to said process command.

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11. A control method for a disk control system that manages,
as units, logical devices, which are logical storage regions
that have been set in a storage region provided by a disk drive,
that stores a correspondence between said logical devices and
25 logical units, which are storage regions that have been set
logically, that receives a process command that has been sent
from an information processing device, and that performs
processing with respect to a logical device corresponding to
the logical unit specified by that process command, the control
30 method comprising, when a process command has been received

for a logical unit:

if a logical device has been assigned to that logical unit,
performing with regard to that logical device a process
corresponding to that process command;

5 if no logical device has been assigned to that logical
unit and that process command is a command that does not cause
a process with regard to said logical device, performing a
process corresponding to that process command without
assigning a logical device to that logical unit; and

10 if no logical device has been assigned to that logical
unit and that process command is a command that causes a process
with regard to said logical device, assigning a logical device
to said logical unit and performing with regard to that logical
device a process corresponding to that process command.

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